

CLAIMS

We claim:

1. A computer-based method of data replication of data in a programmable computer system having an ISAM database and a transaction log file; the ISAM database having fields of tables and the transaction log file maintaining all files transactions of the ISAM database; comprising the steps of:

- 5 polling the transaction log file for file transactions of at least one selected ISAM database fields of tables by at least one data replication server;
 - reading the polled file transactions of the at least one selected ISAM database fields of tables by the at least one data replication server; and
 - sending the polled file transactions of the at least one selected ISAM database
- 10 fields of tables from the at least one data replication server to at least one relational database;

whereby the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time.

2. The computer-based method of claim 1, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent from the at least one data replication server to at least one relational database is sent via respective relational database connections.

3. The computer-based method of claim 1, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent from the at least one data replication server to at least one relational database is sent via respective relational database connections; the at least one relational database being a relational database selected from the group consisting of: an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database; and the respective relational database connections utilizing SQL NET protocol.

4. The computer-based method of claim 1, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent from the at least one data replication server to at least one relational database is sent via respective relational database connections; the at least one relational database selected from the group consisting of: an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database; and the respective relational database connections utilizing an SQL NET protocol.

5. The computer-based method of claim 1, wherein the system having an ISAM database and a transaction log file is a PROMIS™ system.

6. The computer-based method of claim 1, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time by SQL query tools.

7. The computer-based method of claim 1, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time by SQL query tools; the SQL query tools being selected from the group consisting of Oracle™ SQL/Plus and Microsoft Visual Basic/Access™.

8. A computer-based method of data replication of data in a programmable computer system having an ISAM database and a transaction log file; the ISAM database having fields of tables and the transaction log file maintaining all files transactions of the ISAM database; comprising the steps of:

- 5 polling the transaction log file for file transactions of at least one selected ISAM database fields of tables by at least one data replication server;
 - reading the polled file transactions of the at least one selected ISAM database fields of tables by the at least one data replication server; and
 - 10 sending the polled file transactions of the at least one selected ISAM database fields of tables from the at least one data replication server to at least one relational database; wherein the polled file transactions of the at least one selected ISAM database fields of tables sent from the at least one data replication server to at least one relational database is sent via respective relational database connections;
 - 15 whereby the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time.

9. The computer-based method of claim 8, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent from the at least one

data replication server to at least one relational database is sent via respective relational database connections; the at least one relational database being a relational database selected from the group consisting of: an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database; and the respective relational database connections utilizing SQL NET protocol.

10. The computer-based method of claim 8, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent from the at least one data replication server to at least one relational database is sent via respective relational database connections; the at least one relational database selected from the group consisting of: an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database; and the respective relational database connections utilizing an SQL NET protocol.

11. The computer-based method of claim 8, wherein the system having an ISAM database and a transaction log file is a PROMIS™ system.

12. The computer-based method of claim 8, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time by SQL query tools.

13. The computer-based method of claim 8, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one

relational database is accessible in real time by SQL query tools; the SQL query tools being selected from the group consisting of Oracle™ SQL/Plus and Microsoft Visual Basic/Access™.

14. A data processing computer-based system for data replication of data in a sub-system having an ISAM database and a transaction log file; the ISAM database having fields of tables and the transaction log file maintaining all files transactions of the ISAM database; the ISAM database comprising:

5 polling means for polling the transaction log file for file transactions of at least one selected ISAM database fields of tables by at least one data replication server;

 reading means for reading the polled file transactions of the at least one selected ISAM database fields of tables by the at least one data replication server;

10 and

 sending means for sending the polled file transactions of the at least one selected ISAM database fields of tables from the at least one data replication server to at least one relational database through at least one respective communication link;

15 whereby the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time.

15. The computer-based system of claim 14, wherein two or more data replication servers poll the transaction log file by two or more respective polling means; the polled file transactions of the at least one selected ISAM database fields of tables is

sent from the two or more data replication servers to at least one relational database via respective relational database communication connections.

16. The computer-based system of claim 14, wherein the at least one relational database being a relational database selected from the group consisting of: an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database; and the respective relational database connections utilizing SQL NET protocol.

17. The computer-based system of claim 14, wherein the at least one relational database selected from the group consisting of: an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database; and the respective relational database connections utilizing an SQL NET protocol.

18. The computer-based system of claim 14, wherein the sub-system having an ISAM database and a transaction log file is a PROMIS™ sub-system.

19. The computer-based system of claim 14, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time by SQL query tools.

20. The computer-based system of claim 14, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time by SQL query tools; the SQL query tools

being selected from the group consisting of Oracle™ SQL/Plus and Microsoft Visual Basic/Access™.

21. A data processing computer-based system for data replication of data in a sub-system having an ISAM database and a transaction log file; the ISAM database having fields of tables and the transaction log file maintaining all files transactions of the ISAM database; the ISAM database comprising:

5 polling means for polling the transaction log file for file transactions of at least one selected ISAM database fields of tables by at least one data replication server;

 reading means for reading the polled file transactions of the at least one selected ISAM database fields of tables by the at least one data replication server;

10 and

 sending means for sending the polled file transactions of the at least one selected ISAM database fields of tables from the at least one data replication server to at least one relational database through at least one respective communication link; the at least one respective communication link utilizing SQL NET protocol;

15 whereby the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time.

22. The computer-based system of claim 21, wherein two or more data replication servers poll the transaction log file by two or more respective polling means; the polled file transactions of the at least one selected ISAM database fields of tables is

sent from the two or more data replication servers to at least one relational database via respective relational database communication connections.

23. The computer-based system of claim 21, wherein the at least one relational database being a relational database selected from the group consisting of: an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database.

24. The computer-based system of claim 21, wherein the at least one relational database selected from the group consisting of: an Engineer Data Analysis (EDA) relational database, and a Manufacture Execution System (MES) relational database; and the respective relational database connections utilizing an SQL NET protocol.

25. The computer-based system of claim 21, wherein the sub-system having an ISAM database and a transaction log file is a PROMIS™ sub-system.

26. The computer-based system of claim 21, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time by SQL query tools.

27. The computer-based system of claim 21, wherein the polled file transactions of the at least one selected ISAM database fields of tables sent to the at least one relational database is accessible in real time by SQL query tools; the SQL query tools

being selected from the group consisting of Oracle™ SQL/Plus and Microsoft Visual Basic/Access™.